

**REMARKS/ARGUMENTS**

Reexamination of the captioned application is respectfully requested.

**A. SUMMARY OF THIS AMENDMENT**

By the current amendment, Applicants basically:

1. Rewrite claim 7 as an independent claim, including limitations from previous claims 1 and 6.
2. Cancel claims 1, 6, 12 without prejudice or disclaimer.
3. Rewrite claim 22 as an independent claim, including limitations from previous claims 16 and 21.
4. Cancel claims 16, 21, and 27 without prejudice or disclaimer.
5. Amend the dependencies of claims 31 – 34.
6. Rewrite claim 40 as an independent claim, including limitations from previous claims 35 and 39.
7. Cancel claims 35, 39, and 44 – 45 without prejudice or disclaimer.
8. Amend the dependencies of claims 36 – 38.
9. Rewrite claim 50 as an independent claim, including limitations from previous claims 46 and 49.
10. Cancel claims 46 and 49 without prejudice or disclaimer.
11. Amend the dependencies of claims 47 – 48.
12. Respectfully traverse all rejections.
13. Apprise the Examiner of the filing of a Terminal Disclaimer to overcome the provisional rejection of claims 1-34 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 8-13, 17-20, 24-27, 29, 33-36, 39, 41-43 and 47-49 of copending application no. 10/717,313.
14. Advise the Examiner of the simultaneous filing of a Petition to Extend.

## **B. PATENTABILITY OF THE CLAIMS**

Claims 1-34 stand rejected under 35 USC §102(b) as being anticipated by U.S. Patent 6,141,393 to Thomas et al. All prior art rejections are respectfully traversed for at least the following reasons.

Each of rewritten independent claims 7, 22, 40, and 50 includes limitations comparable to those found allowable in copending application no. 10/717,313 for which the filing of a Terminal Disclaimer has been required by the Office. These limitations involve a Fourier Transform and a dimensional receptivity vector which includes successive sets of pilot data. Applicant's dimensional receptivity vector has a frequency related to a difference between phase components of complex values of the dimensional receptivity vector, there being plural possible frequencies for the dimensional receptivity vector, the plural possible frequencies being represented by a frequency index. Applicant thus uses his frequency index to determine Doppler shift.

The foregoing, among other features, is not taught or suggested by U.S. Patent 6,141,393 to Thomas et al. For example, the pilot signals 650 of U.S. Patent 6,141,393 to Thomas et al (see Fig. 6, col. 8, line 59+) are not to take into consideration Doppler shift of a received signal, but rather subcarriers of a OFDM system.

## **C. ALLEGED NON-STATUTORY DOUBLE PATENTING**

Claims 1-34 stand rejected under 35 USC §102(b) as being anticipated by U.S. Provisionally rejected claims 1-34 on the ground of nonstatutory double patenting over claims 1, 4, 8-13, 17-20, 24-27, 29, 33-36, 39, 41-43 and 47-49 of copending application no. 10/717,313. A Terminal Disclaimer, electronically filed on even date herewith, overcomes the obviousness-type double patenting rejection.

**D. MISCELLANEOUS**

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_/H. Warren Burnam, Jr./

H. Warren Burnam, Jr.  
Reg. No. 29,366

HWB:lsb  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100